

Application S/N 10/714,799
Amendment/Response Dated December 4, 2004
Reply to Office Action Mailed on August 6, 2004

AFFIRMATION OF ELECTION

Applicant hereby affirms its election to prosecute the invention of Group 1, claims 1-14 and 16-28, without traverse.

AMENDMENTS TO THE SPECIFICATION

The present application contained no paragraph numbers when initially submitted, therefore, for ease of description, reference is made to the paragraph page number and line numbers as originally filed.

Please replace the ABSTRACT with the following amended ABSTRACT:

ABSTRACT

A scalable fish rearing raceway system and method of making same is provided, incorporating a fish containment structure having two semi-circular end sections, and two or more parallel fish raceways to maintain optimal current velocity, surrounding a central zone for housing water treatment systems and a secondary fish crop. Means of eliminating heavy Heavy particulates are eliminated from the main fish rearing channels is accomplished by use of conical areas located at either end of [[an]] the parallel elongated raceways. Continuous removal of dead or dying fish from the raceway is accomplished by means of a floating mortality catcher consisting of a screened ramp at the surface of the cones which continuously collect moribund and dead fish. Removal of dead and dying fish significantly reduces labor costs associated with the frequent manual removal of such fish and reduces the transmission of infectious diseases. A U-tube oxygenation system continuously injects air or oxygen gas which is dissolved into the water. Several probes monitor and control dissolved oxygen levels in the water. These monitors are connected to a centralized alarm and computer monitoring system. The raceway is equipped

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with feed silos that can dispense feed of several sizes and multiple frequency throughout the day. The inventory of fish is monitored by an underwater scanning device which reduces the handling stress associated with netting. The raceway can be stocked with uniform sized fish which are grown to market size as a batch culture. Alternatively, grading bars can separate and move the larger fish underwater to an adjacent raceway through the common fish transfer channel, and the resulting space subsequently restocked with smaller fish. Grading bars separate and move fish underwater to an adjacent raceway through a common fish transfer channel. This provides for a continuous grading and restocking method which results in a much greater annual yield. This larger scalable fish production system substantially reduces the direct labor and capital costs associated with the production monitoring, feeding and harvesting of fish as compared with conventional circular fish rearing tanks. It also requires lower capital costs since it requires fewer components such as monitors, feeders, oxygen diffusers and other equipment per unit of fish produced.

Please replace the paragraph on page 9, lines 11 - 18, with the following amended paragraph:

Continuous removal of dead fish from the raceway is accomplished by means of a sinking fish mortality catcher consisting of a screened ramp at the entrance to the hydrocones which collect both moribund (sunken) and "long" dead (floating) fish. A similar device is mounted at the main drain box on the outside of the raceway to capture dead and floating fish mortality. The continuous removal of dead and dying fish significantly reduces labor costs associated with the frequent manual removal of such fish and reduces the transmittal of infectious diseases by the immediate removal of the dead and dying fish.

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Please replace the paragraph on page 11, lines 12 - 15, with the following amended paragraph:

Fig. 4 is an enlarged partial side elevational cross-sectional view of one end of the of the scalable fish rearing raceway system constructed in accordance with the present invention, illustrating the hydrocone structure and the floor spoilers, the hydrocone structure, and the fish harvesting/grading channel in greater detail;

Please replace the paragraph on page 17, lines 3 - 7, with the following amended paragraph:

Large particles of solid material are removed from the elongated fish channel raceway **14** after collection in the fish channel drain box **56**. The effluent from the hydrocone structure **22** flows to the drain box **48** by means of a hydrocone drain line **54**. The effluent from the drain box **48** is removed for treatment by the effluent pipes, namely effluent pipe **50** for drain box **48** and effluent pipe **52** for drain box **46** (as shown in Fig 1).